BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

Measurement Sheet- 1st & Final Bill

Measurement recorded on :- 08-09-2021

Sch.-B Item. No.4	**Diversion of Water course by providing coffer dams** or bunds or islands as may be necessary for pipes and abutments, foundations, bailing out or pumping water during exavation and until completion etc., complete beyond 1.5m depth upto and including 3m depth

Abbigere near Gangammagudi Police station

Chainage		Side	Unit	No	Length	Width	Depth	Qty	Remarks
From	TO								
0.00	30.00	LHS	Cum	1	30.00	2.50	1.50	112.50	for R.W
30.00	60.00	LHS	Cum	1	30.00	2.50	1.50	112.50	for R.W
60.00	62.20	LHS	Cum	1	2.20	2.50	1.50	8.26	for R.W
62.20	84.50	LHS	Cum	1	22.30	2.50	1.50	83.63	for R.W
			Cum					316.89	

Sch.-B Item. No.5	Earth work in Excavation in **Marshy soil** for foundation of structures as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per MORTH specification No.304 V. **upto 3m depth By mechanical means**

Abbigere near Gangammagudi Police station

Chainage		Side	Unit	No	Length	Width	Depth	Qty	Remarks
From	TO								
0.00	30.00	LHS	Cum	1	30.00	9.00	1.5	405.00	for R.W
30.00	60.00	LHS	Cum	1	30.00	9.20	1.5	414.00	for R.W
60.00	62.20	LHS	Cum	1	2.20	8.00	1.4	24.64	for R.W
62.20	84.50	LHS	Cum	1	22.30	8.50	1.45	274.85	for R.W
			Cum					1118.49	

B.N.

Contractor | **Project Management Consultant** | **Asst. Engineer SWD Dasarahalli Zone** | **Asst. Executive Engineer SWD Dasarahalli Zone**

8/9/21

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BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

Measurement Sheet- 1st & Final Bill

Measurement recorded on :- 10-09-2021

Sch.-B Item. No.6	**Earth work in Excavation for foundation of structures** as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per MORTH specification No.304 B. **in Ordinary soil upto 3m depth(By mechanical means)**

Abbigere near Gangammagudi Police station

Chainage		Side	Unit	No	Length	Width	Depth	Qty	Remarks
From	TO								
0.00	30.00	LHS	Cum	1	30.00	(4.7+6.5)/2	3.00	504.00	for R.W
			Cum	-1	30.00	5.60	1.50	-252.00	for R.W
30.00	60.00	LHS	Cum	1	30.00	(4.7+6.5)/2	2.90	487.20	for R.W
			Cum	-1	30.00	5.60	1.50	-252.00	for R.W
60.00	62.20	LHS	Cum	1	2.20	(4.7+6.5)/2	2.90	35.73	for R.W
			Cum	-1	2.20	5.60	1.40	-17.25	for R.W
62.20	84.50	LHS	Cum	1	22.30	(4.7+6.5)/2	2.85	355.91	for R.W
			Cum	-1	22.30	5.60	1.45	-181.08	for R.W
			Cum					**680.51**	

Sch.-B Item. No.7	Providing and filling in foundation with granite/trap broken metal of 100 MM and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour charges and with all lead and lift etc complete as per specification and the direction of the Engineer in charge

Abbigere near Gangammagudi Police station

Chainage		Side	Unit	No	Length	Width	Depth	Qty	Remarks
From	TO								
0.00	30.00	LHS	Cum	1	30.00	4.70	0.30	42.30	for R.W
30.00	60.00	LHS	Cum	1	30.00	4.70	0.30	42.30	for R.W
60.00	62.20	LHS	Cum	1	2.20	4.70	0.30	3.11	for R.W
62.20	84.50	LHS	Cum	1	22.30	4.70	0.30	31.45	for R.W
			Cum					**119.16**	

Contractor

Project Management Consultant

Asst. Engineer
SWD Dasarahalli Zone

Asst. Executive Engineer
SWD Dasarahalli Zone

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BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

Measurement Sheet- 1st & Final Bill

Measurement recorded on :-12-09-2021

Sch.-B Item. No.09	Plain Cement Concrete 1:2:4 with OPC cement @ 240 kgs, with 40mm and down size graded granite metal coarse aggregates @0.84 cum and fine aggregates @ 0.56cum, in open foundation including cost of all materials, labour, HOM curing, from works, scaffolding and centring complete as per Specification complete as Drawing and Technical Specifications. MORTH Specification No.1500, 1700 & 2100

Abbigere near Gangammagudi Police station

Chainage		Side	Unit	No	Length	Width	Depth	Qty	Remarks
From	TO								
0.00	30.00	LHS	Cum	1	30.00	4.40	0.15	19.80	for R.W
30.00	60.00	LHS	Cum	1	30.00	4.40	0.15	19.80	for R.W
60.00	62.20	LHS	Cum	1	2.20	4.40	0.15	1.46	for R.W
62.20	84.50	LHS	Cum	1	22.30	4.40	0.15	14.72	for R.W
			Cum					55.78	

B.N.

Contractor

Shipra Consulting Engineers Pvt. Ltd. Bangalore

Project Management Cosultant

Asst. Engineer
SWD Dasarahalli Zone

12/9/21

Asst. Executive Engineer
SWD Dasarahalli Zone

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BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

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NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

Measurement Sheet- 1st & Final Bill

Measurement recorded on :-15-09-2021

Sch.-B Item. No.19	Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage ,shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 TMT Bars Fe 500 (For Raft & Sub Structure).

Chainage	LHS	Retaining Wall								
From	To	Abbigere near Gangammagudi Police station								
0.00	30.00									
Description	Shape of Bar/ Bar No.	Dia of Bars (mm)	Spacing (M)	No.	No of Bars	Cut Length in (M)	10	12	16	20
30.00										
Raft Bottom Main Bar	1	20	0.100	1	301	4.40				1,324.40
Raft Top Bar	2	16	0.100	1	301	4.52			1,360.52	-
Distribution	3	10	0.150	2	28	30.00	1,680.00			
Wall Drain Side	4	12	0.125	1	241	8.05		1,940.05		
Wall Filling Side Main Bar	5	16	0.150	1	201	8.05			1,618.05	-
Wall Distribution Both Side	6	10	0.150	2	45	30.00	2,700.00			
Wall Filling Side Short Bar	7	20	0.150	1	201	4.85				974.85
Chairs		16		1	50	2.75			137.50	-
Spacer Bars		12		1	80	1.00		80.00		
						Total Length (Rmt)	4,380.00	2,020.05	3,116.07	2,299.25
						Unit weight of bar	0.617	0.888	1.580	2.469
						Qty in KG	2702.46	1795.82	4923.39	5676.85
						Total Qty in KG	15098.52			
						Grand Total Qty	15.1	MT		

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Contractor

Project Management Consultant

Asst. Engineer
SWD Dasarahalli Zone

Asst. Executive Engineer
SWD Dasarahalli Zone

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BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

Measurement Sheet- 1st & Final Bill

Measurement recorded on :-15-09-2021

Sch.-B Item. No.19	Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 TMT Bars Fe 500 (For Raft & Sub Structure).									
Chainage	**LHS**	**Retaining Wall**								
From	**To**	**Abbigere near Gangammagudi Police station**								
30.00	60.00									
Description	**Shape of Bar/ Bar No.**	**Dia of Bars (mm)**	**Spacing (M)**	**No.**	**No of Bars**	**Cut Length in (M)**	**10**	**12**	**16**	**20**
30.00										
Raft Bottom Main Bar	1	20	0.100	1	301	4.40				1,324.40
Raft Top Bar	2	16	0.100	1	301	4.52			1,360.52	-
Distribution	3	10	0.150	2	28	30.00	1,680.00			
Wall Drain Side	4	12	0.125	1	241	8.05		1,940.05		
Wall Filling Side Main Bar	5	16	0.150	1	201	8.05			1,618.05	-
Wall Distribution Both Side	6	10	0.150	2	45	30.00	2,700.00			
Wall Filling Side Short Bar	7	20	0.150	1	201	4.85				974.85
Chairs		16		1	50	2.75			137.50	-
Spacer Bars		12		1	80	1.00		80.00		
						Total Length (Rmt)	4,380.00	2,020.05	3,116.07	2,299.25
						Unit weight of bar	**0.617**	**0.889**	**1.580**	**2.469**
						Qty in KG	2702.46	1795.82	4923.39	5676.85
						Total Qty in KG	15098.52			
						Grand Total Qty	**15.1**	**MT**		

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Consulting Engineers Pvt. Ltd. Bangalore

13.N.

Contractor

Project Management Consultant

Asst. Engineer
SWD Dasarahalli Zone

Asst. Executive Engineer
SWD Dasarahalli Zone

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BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

Measurement Sheet- 1st & Final Bill

Measurement recorded on :-16-09-2021

Sch.-B Item. No.19	Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 TMT Bars Fe 500 (For Raft & Sub Structure).									
Chainage	LHS	Retaining Wall								
From	To	Abbigere near Gangammagudi Police station								
60.00	62.20									
Description	Shape of Bar/ Bar No.	Dia of Bars (mm)	Spacing (M)	No.	No of Bars	Cut Length in (M)	10	12	16	20
2.20										
Raft Bottom Main Bar	1	20	0.100	1	23	4.40				101.20
Raft Top Bar	2	16	0.100	1	23	4.52			103.96	-
Distribution	3	10	0.150	2	28	2.20	123.20			
Wall Drain Side	4	12	0.125	1	19	8.05		152.95		
Wall Filling Side Main Bar	5	16	0.150	1	16	8.05			128.80	-
Wall Distribution Both Side	6	10	0.150	2	45	2.20	198.00			
Wall Filling Side Short Bar	7	20	0.150	1	16	4.85				77.60
Chairs		16		1	5	2.75			13.75	-
Spacer Bars		12		1	7	1.00		7.00		
						Total Length (Rmt)	321.20	159.95	246.51	178.80
						Unit weight of bar	0.617	0.889	1.580	2.469
						Qty in KG	198.18	142.20	389.49	441.46
						Total Qty in KG	1171.33			
						Grand Total Qty	1.17	MT		

Contractor

Project Management Consultant

Asst. Engineer
SWD Dasarahalli Zone

Asst. Executive Engineer
SWD Dasarahalli Zone

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BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

Measurement Sheet- 1st & Final Bill

Measurement recorded on :-16-09-2021

Sch.-B Item. No.19	Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 TMT Bars Fe 500 (For Raft & Sub Structure).

Chainage	LHS	Retaining Wall								
From	To	Abbigere near Gangammagudi Police station								
62.20	84.50									
Description	Shape of Bar/ Bar No.	Dia of Bars (mm)	Spacing (M)	No.	No of Bars	Cut Length in (M)	10	12	16	20
22.30										
Raft Bottom Main Bar	1	20	0.100	1	224	4.40				985.60
Raft Top Bar	2	16	0.100	1	224	4.52			1,012.48	-
Distribution	3	10	0.150	2	28	22.30	1,248.80			
Wall Drain Side	4	12	0.125	1	179	6.80		1,217.20		
Wall Filling Side Main Bar	5	16	0.150	1	150	6.80			1,020.00	-
Wall Distribution Both Side	6	10	0.150	2	37	22.30	1,650.20			
Wall Filling Side Short Bar	7	20	0.150	1	150	4.85				727.50
Chairs		16		1	38	2.75			104.50	-
Spacer Bars		12		1	49	1.00		49.00		
						Total Length (Rmt)	2,899.00	1,266.20	2,136.98	1,713.10
						Unit weight of bar	0.617	0.889	1.580	2.469
						Qty in KG	1788.68	1125.65	3376.43	4229.64
						Total Qty in KG	10520.40			
						Grand Total Qty	10.52	MT		

Checked
Accepted 16/9/21

B.N.

Contractor

Project Management Consultant

Asst. Engineer
SWD Dasarahalli Zone

Asst. Executive Engineer
SWD Dasarahalli Zone

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BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

Measurement Sheet- 1st & Final Bill

Measurement recorded on :- 17-09-2021

Sch.-B Item. No.10	Providing and laying Plain / Reinforced Cement Concrete design mix **M25** with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008,**Open Foundation** complete as per Drawing and Technical Specification including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per Specifications. MORTH Specification No. 1500,1700 & 2100

Abbigere near Gangammagudi Police station

Chainage From	Chainage TO	Side	Unit	No	Length	Width	Depth	Qty	Remarks
0.00	30.00	LHS	Cum	1	30.00	4.20	0.400	50.40	for R.W
			Cum	0.5	30.00	2.20	0.200	6.60	
			Cum	0.5	30.00	1.40	0.200	4.20	
			Cum	1	30.00	0.60	0.200	3.60	
30.00	60.00	LHS	Cum	1	30.00	4.20	0.400	50.40	for R.W
			Cum	0.5	30.00	2.20	0.200	6.60	
			Cum	0.5	30.00	1.40	0.200	4.20	
			Cum	1	30.00	0.60	0.200	3.60	
60.00	62.20	LHS	Cum	1	2.20	4.20	0.400	3.70	for R.W
			Cum	0.5	2.20	2.20	0.200	0.49	
			Cum	0.5	2.20	1.40	0.200	0.31	
			Cum	1	2.20	0.60	0.200	0.27	
62.20	84.50	LHS	Cum	1	22.30	4.20	0.400	37.47	for R.W
			Cum	0.5	22.30	2.20	0.200	4.91	
			Cum	0.5	22.30	1.40	0.200	3.13	
			Cum	1	22.30	0.60	0.200	2.68	
								182.56	
			Cum						

17/9/21

Contractor

Project Management Consultant

Asst. Engineer
SWD Dasarahalli Zone

Asst. Executive Engineer
SWD Dasarahalli Zone

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BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

EE

Measurement Sheet- 1st & Final Bill

Measurement recorded on :- 18-09-2021

Sch.-B Item. No.11	Design mix M25 with OPC cement @340 kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 upto the hieght of 5.00 mtrs(For Sub Structure) . As direction of Engineer-in-charge

Abbigere near Gangammagudi Police station

Chainage		Side	Unit	No	Length	Width	Depth	Qty	Remarks
From	TO					0.537			
0.00	30.00	LHS	Cum	1	30.00	(0.6+0.474)/2	2.40	38.67	for R.W 1st Lift
30.00	60.00	LHS	Cum	1	30.00	(0.6+0.474)/2	2.40	38.67	for R.W 1st Lift
60.00	62.20	LHS	Cum	1	2.20	(0.6+0.474)/2	2.40	2.84	for R.W 1st Lift
62.20	84.50	LHS	Cum	1	22.30	(0.6+0.444)/2	2.40	27.94	for R.W 1st Lift
								108.12	

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Contractor

Project Management Cosultant

Asst. Engineer
SWD Dasarahalli Zone

Asst. Executive Engineer
SWD Dasarahalli Zone

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BRUHATH BANGALORE MAHANAGARA PALIKE

Storm Water Drains, Dasarahalli Zone.

NAME OF WORK : CONSTRUCTION OF SWD U SHAPE DRAIN AT ABBIGERE POLICE STATION ROAD TO JUICE FACTORY IN WARD NO.12

Measurement Sheet- 1st & Final Bill

Measurement recorded on :- 19-09-2021	
Sch.-B Item. No.11	Design mix M25 with OPC cement @340 kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 upto the hieght of 5.00 mtrs(For Sub Structure) . As direction of Engineer-in-charge

Abbigere near Gangammagudi Police station

Chainage		Side	Unit	No	Length	Width	Depth	Qty	Remarks
From	TO								
0.00	30.00	LHS	Cum	1	30.00	(0.474+0.347)/2	2.40	29.56	for R.W 2nd Lift
30.00	60.00	LHS	Cum	1	30.00	(0.474+0.347)/2	2.40	29.56	for R.W 2nd Lift
60.00	62.20	LHS	Cum	1	2.20	(0.474+0.347)/2	2.40	2.17	for R.W 2nd Lift
62.20	84.50	LHS	Cum	1	22.30	(0.444+0.289)/2	2.40	19.62	for R.W 2nd Lift
								80.91	

Contractor

Project Management Consultant

Asst. Engineer
SWD Dasarahalli Zone

Asst. Executive Engineer
SWD Dasarahalli Zone

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